

IN THE UNITED STATES PATENT & TRADEMARK OFFICE

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Applicant: HARRY ANTHONY LESLIE

Docket No: 20206-135 (P00-3281US)

Serial No: 10/027,309

Group Art Unit: 2121

Filing Date: December 19, 2001

Examiner: UNKNOWN

For: "Method and System for Rowcount Estimation With Multi-Column Statistics and Histograms"

Assistant Commissioner for Patents
Washington, D.C. 20231

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APR 25 2002

Technology Center 2100

PRELIMINARY AMENDMENT

Sir:

Before examination of the above-referenced application, please amend the application as follows:

In the specification:

A clean version of the paragraph starting at page 9, line 8, should read as follows:

Whereas prior art systems, as described above, assume complete independence between joined columns, an embodiment of the invention assumes complete dependence between joined columns in order to determine an estimated selectivity to be passed and used by optimizer 112 of Figure 1. In implementing this embodiment, a minimum single column selectivity from columns A and B is chosen to produce an estimate of the join selectivity. Accordingly, a minimum selectivity value will produce a larger row selectivity (or join selectivity). In applying this method of the present invention to columns A and B, the row selectivity is estimated using the following equation:

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$$\begin{aligned} S_{dj} &= \text{MIN}(1/\text{CurUecA}, 1/\text{CurUecB}) * X_{\text{prod}} \\ &= 1/102 * 80\,000 \\ &= 784 \text{ rows} \end{aligned}$$

where the subscript dj denotes a completely dependent join and Xprod represents the cross product of columns A and B. We can rewrite the above equation by applying certain identities. We note that row selectivities for columns A and B are respectively the values:

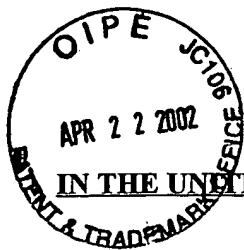
RowSelA = 1/CurUecA, and

RowSelB = 1/CurUecB

where

RowSelA is the row selectivity for column A, and

RowSelB is the row selectivity for column B.



2121

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TRANSMITTAL FOR PRELIMINARY AMENDMENT Technology Center 2100

- ☒ Transmitted herewith are the following documents for the above-referenced application:
- ☒ Preliminary Amendment w/Marked-up version of Amended Specification Paragraphs (Exhibit A) and Marked-up version of Amended Claims (Exhibit B).
 - ☒ Postcard.

Commissioner is authorized to charge any required fees, additional fees, or credit any overpayment to Deposit Account 02-3964 (Order No. 20206-135).

Date: 4-10-02



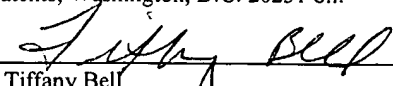
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CERTIFICATE OF MAILING (37 CFR 1.8(a))

I hereby certify that this paper (along with any referred to as being attached or enclosed) is being deposited with the U.S. Postal Service as first class mail in an envelope addressed to Assistant Commissioner of Patents, Washington, D.C. 20231 on:

Date: 4-10-02



by: Tiffany Bell